

Title (en)  
Improved electrolytic cell

Title (de)  
Verbesserte elektrolytische Zelle

Title (fr)  
Cellule électrolytique améliorée

Publication  
**EP 2860287 A1 20150415 (EN)**

Application  
**EP 13188212 A 20131011**

Priority  
EP 13188212 A 20131011

Abstract (en)  
An improved electrolytic cell and a process for the manufacture of halogens, especially of F<sub>2</sub>, using this cell is described which cell comprises at least one diaphragm or at least one membrane, preferably a diaphragm, between the cathode compartment and the anode compartment. The cell provides improved current efficiency and improved energy efficiency because the distance between cathode parts and anode can be decreased compared to conventional electrolytic cells, and the recombination of H<sub>2</sub> and F<sub>2</sub> is prevented.

IPC 8 full level  
**C25B 1/26** (2006.01); **C25B 9/19** (2021.01)

CPC (source: EP)  
**C25B 1/245** (2013.01); **C25B 1/26** (2013.01); **C25B 9/19** (2021.01); **C25B 13/04** (2013.01); **C25B 13/08** (2013.01); **Y02P 20/20** (2015.11)

Citation (applicant)  
• WO 2007116033 A1 20071018 - SOLVAY FLUOR GMBH [DE], et al  
• WO 2009080615 A2 20090702 - SOLVAY FLUOR GMBH [DE], et al  
• WO 2009092453 A2 20090730 - SOLVAY FLUOR GMBH [DE], et al  
• EP 2010066109 W 20101026  
• WO 2012034978 A1 20120322 - SOLVAY [BE], et al

Citation (search report)  
• [X] EP 1283280 A1 20030212 - TOYO TANSO CO [JP]  
• [X] GB 346774 A 19310409 - IG FARBENINDUSTRIE AG  
• [X] US 2568844 A 19510925 - BENNING ANTHONY F, et al  
• [XY] US 2996446 A 19610815 - ALBERT DAVIES, et al  
• [X] JP 2011246747 A 20111208 - YOKOGAWA ELECTRIC CORP  
• [XI] US 3291708 A 19661213 - WALTER JUDA  
• [XY] US 4511440 A 19850416 - SAPROKHIN ALEXANDER M [US], et al  
• [A] US 4256551 A 19810317 - CLIFF MICHAEL J, et al

Cited by  
CN111183247A; US11401614B2; WO2023232551A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2860287 A1 20150415**; TW 201518549 A 20150516; WO 2015052253 A1 20150416

DOCDB simple family (application)  
**EP 13188212 A 20131011**; EP 2014071571 W 20141008; TW 103135205 A 20141009